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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,122

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EXAMINER

HOLLOWAY III, EDWIN C

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

06/08/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/585,122	FORSTROM, GORAN	
	Examiner	Art Unit	
	EDWIN HOLLOWAY III	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

EXAMINER'S RESPONSE

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 February 2011 has been entered in response to the RCE filed 24 March 2011.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Rix '781 (US 20040056781 including incorporated US 6650254) in combination with Iggulden (US5579002).

Regarding claim 1, Rix '781 discloses system (computer input device 38) for control and monitoring equipment, comprising: a control panel (base 42, control panel in par 0143-0144); and at least one movable member (input members 40). Each movable module comprises at least one instrument, indicator or control member because elements 40 may be keys, buttons, button pads, thumb pads, joysticks, sliders, dials, track pads, track balls, jog/shuttle wheels, displays, strain gauge, pointing devices, acoustic speakers, switch 82 or microprocessor 140) in Rix 781 pars (0084,0085, 0096,0108,0114). The input members such as joysticks control a device such as a game

and are considered to be control members. The members are called "controls" in pars 0094 and 0144 of Rix. The members may also include a microprocessor controller that is considered a control member. The members may includes indicators such as displays that correspond to indicators or instruments. Rix includes attachment elements on the at least one movable module and control panel configured to attach the at least one movable module to the control panel (attachment including adhesives such as Magstick, POST-IT or VELCRO in pars. 0086-0090. Rix includes a central unit (base microcontroller 100) configured transmit and receive signals (DATA IN/OUT via transmitter 116 and receiver 118 - fig. 6) to at least one movable module(46,48,50). The movable modules receives signals from and transmits signal to the central unit (two way communication in par 0078,0115). The central unit may transmit data to the member by modulating the carrier (par 0077) and the member may transmit to the base by backscatter modulation and may include a transmitter (col. 0043-0045). The central unit is configured to influence/control an externally controlled unit (host 64). See figs. 1,6 and pars 0041, 0047-0049 0068-0069 and 0074-0078.

Rix '781 differs from claim 1 by disclosing an externally controlled unit rather than the claimed units.

Iggulden disclose an analogous art user configurable control device for controlling a plurality of units (devices). See col. 4 lines 1-6 and 36-48.

Regarding claim 1, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Rix '781 the controlled/influenced

units/devices of Iggulden to allow the user to make manual selection of a multiplicity of functions such as controlling consumer electronic devices (TV, VCR, stereo, etc.) suggested by the control of host computer or other device in Rix '781.

Regarding claim 2, Rix '781 discloses wherein the modules are adapted to work with wirelessly transferred electrical energy transmitted by an electrical energy transmitter (116) located in or adjacent the control panel. See pars 0077-0079, 0099 and 0105.

Regarding claim 3, Rix '781 includes illumination elements such as LEDs to indicate functions (par 0067, 0076), but does not expressly disclose a light source arranged in the control panel and comprising a light used for background lighting of the module located on the control panel.

Iggulden disclose an analogous art user configurable control device with light sources such as LEDs for illuminating movable keys from below to in response to actuation (fig 12 col. 9 lines 22-33, col. 10 lines 13-32)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Rix '781 the limitation of a light source arranged in the control panel and comprising a light used for background lighting of the module located on the control panel as disclosed in Iggulden to indicate actuation of the module.

Regarding new claim 4, the at least one movable module comprises an internal electric power source would have been obvious in view of the internal power source in Rix '781 (par 0046).

Regarding new claim 5, the control panel comprises at least one opening configured to receive the at least one movable module, wherein the at least one movable module fits in the at least one opening in the control panel would have been obvious in view of the slots 106 in Iggulden for receiving and holding the key modules and suggested by Rix '781 disclosing that the keys be attached to a panel that may be any size, shape and/or contour (par 0049) and/or Rix '254 disclosing an attachment surface including a matrix of receptacles that may have a variety of shapes and sizes (col. 7 lines 28-41).

Regarding new claim 6, the at least one movable module comprises a flange to retain the at least one movable module in the at least one opening would have been obvious in view of the overhang the key cap body 112 and/or tab 116 to retain key 110 in Iggulden (fig. 6,7,9).

Regarding new claim 7, the at least one movable module magnetically attached to control panel would have been obvious in view of the magnet attachment in col. 7 lines 16-26 and col. 24 lines 42-53 of Rix '254 that is incorporated by reference in Rix '781 (par 0145).

Regarding new claim 8, at least one light source configured to light the at least one movable module, wherein the at least one light source is internal to the at least one movable module would have been obvious in view of the module including a display in Rix '781 (pars 0085, 0114) and or the display element including any one of a variety of display devices such as LED, LCD or the like in Iggulden (col. 10 lines 13-31)

Regarding new claim 9, the movable module comprises at least one indicator, pointer, pushbutton, switch, or display would have been obvious in view of the module including buttons, switch (82), pointing devices or display in Rix '781 (pars 0084,0085, 0096,0114) and/or the rotary knobs, slide switches, toggle switches, joysticks, display elements or buttons in Iggulden (col. 10 lines 1-65).

Regarding new claim 11, the at least one movable module communicates with the central unit with Bluetooth would have been obvious in view of incorporated Rix '254 disclosing that the wireless module may communicate by any known broadcast technique or protocol (col. 7 lines 14-26 and col. 24 lines 34-41) and Bluetooth is a known technique or protocols that is disclosed in Rix '781 (pars 0068,0069).

4. Claims 5,6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Rix '781 (US 20040056781 including incorporated US 6650254) in combination with Iggulden (US5579002) as applied above in view of Bramesfeld (US 6140593).

Bramesfeld discloses an analogous art reconfigurable switch array panel housing 12 having a single through bore 18 for each switch module/cap 20. See fig. 1 and col. 1 lines 18-53

Regarding new claim 10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above a plurality of movable modules, wherein the control panel comprises a plurality of openings configured to receive the movable module, wherein one movable module fits in

each opening in the control panel would have been as disclosed in Bramesfeld because Rix '781 disclosing that the keys be attached to a panel that may be any size, shape and/or contour (par 0049) and/or Rix '254 disclosing an attachment surface including a matrix of receptacles that may have a variety of shapes and sizes (col. 7 lines 28-41).

If new claim 5 is interpreted to include one opening per module, then such would have been obvious for the same reasons applied above to claim 10.

Regarding new claim 6, the at least one movable module comprises a flange to retain the at least one movable module in the at least one opening would have been obvious in view of the overhang the key cap body 112 and/or tab 116 to retain key 110 in Iggulden (fig. 6,7,9) and/or the shoulder 44 in Bramesfeld (col. 3 lines 6-10) to engage the front face of the panel to prevent excess pushing.

Response to Arguments

5. Applicant's arguments filed 17 September 2010 have been fully considered but they are not persuasive.

Applicant argues that Rix includes input members that do not suggest instrument, indicator or control modules. The examiner disagrees because members 40 in Rix may be keys, buttons, button pads, thumb pads, joysticks, sliders, dials, track pads, track balls, jog/shuttle wheels, displays, strain gauge, pointing devices, acoustic speakers, switch 82 or microprocessor 140) in Rix 781 pars (0084,0085, 0096,0108,0114). The input members such as joysticks control a device such as a game and are considered to be control members. The members are called "controls" in pars 0094 and 0144 of Rix. The

members may also include a microprocessor controller that is considered a control member. The members may includes indicators such as displays that correspond to indicators or instruments.

Applicant argues that the applied prior art lacks a movable module that transmits and receives signals because the modules passively communicate by modulating the carrier signal and do not function without carrier signal. This argument is not persuasive because Rix discloses two way communication (par 0078, 0115), Rix states that the members "transmit" to the base and may includes transmitters (pars 0043-0045) and the claims do not exclude passive communication. Further, "actively" communicating with a central unit that influences/controls external units would have been obvious because Rix discloses that the input members may each include a transmitter (last three lines of par 0045) for active communication to central unit 42 that influences/control external unit (host 64). Further, Rix '781 (par 0145) incorporates by reference US Application Ser. No. 09542011 that became Rix '254 (US 6650254). Therefore, the disclosure of Rix '254 is part of Rix '781. Rix '254 disclosed that the wireless module may communicate by any known broadcast technique or protocol (col. 7 lines 14-26 and col. 24 lines 34-41) and an active transmitter, such as a Bluetooth transmitter, is a known technique or protocol that is disclosed in Rix '781 (pars 0068,0069).

Applicant argues that Iggulden lacks a panel and module. Applicant is incorrect. Iggulden includes a panel 12 and modules 10.

Applicant argues that Iggulden lacks instrument, indicator or control members.

This argument is not persuasive because the members (elements) in Iggulden are "control elements" (abstract) that may include joysticks or other controls (col. 10 lines 1-12).

Further, the members may include "display elements" in col. 10 lines 13-32 of Iggulden that correspond to instruments or indicators.

Applicant's argues that Iggulden lacks communication means. This argument is not persuasive because Iggulden discloses control elements may contain a resonant circuit that may be inductively coupled without direct contact - or coupled by magnetic, electromagnetic, optical, or acoustic means (col. 9 lines 45-50).

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWIN HOLLOWAY III whose telephone number is (571) 272-3058. The examiner can normally be reached on M-F from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman, can be reached on (571) 272-3059.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/7/2011
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